



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

PC Code: 113201
DP Barcode: D264183

MEMORANDUM

April 5, 2000

SUBJECT: EFED response to BASF comments regarding the EFED chapter of the vinclozolin RED.

FROM: N.E. Federoff, Wildlife Biologist
Dirk F. Young, Ph.D., Environmental Engineer
Environmental Risk Branch IV
Environmental Fate and Effects Division (7507C)

THROUGH: Mah T. Shamim, Ph.D., Chief
Environmental Risk Branch IV
Environmental Fate and Effects Division (7507C)

TO: Susan Lewis, PM 51
Deanna Scher, Team Reviewer
Reregistration Branch I
Special Review and Reregistration Division (7508W)

This memo serves as EFED's response to BASF's comments on the Vinclozolin RED ("BASF Response to the EPA Preliminary Risk Assessment for Vinclozolin" of March 16, 2000). After review of the BASF comments, EFED concluded that no changes to the risk assessment are warranted. Issues specific to EFED (located under tabs 5,6, and 10 of the BASF document) are addressed as follows:

Tab 5. Water Exposure to Vinclozolin:

1. BASF concern: SCIGROW is overly conservative.

EFED response: SCIGROW is EFED's standard groundwater prediction tool which EFED developed to assist with the protection of vulnerable groundwater supplies. SCIGROW is not overly conservative for vulnerable water supplies, but in fact may underpredict groundwater concentrations in certain cases (see SCIGROW documentation).

2. BASF concern: SCIGROW does not account for the fraction of acreage on a given field that is not treated with vinclozolin.

EFED response: SCIGROW is an empirical model, and fraction of treated acreage was not used as a variable for correlation in its development. Rather, pounds a.i. per acre was used in developing the original correlation, and thus it would not be appropriate to incorporate a fraction of acreage treated.

3. BASF concern: BASF prefers that average use rate be used rather than the maximum labeled use rate.

EFED response: EFED recognizes that the use of typical application rates will result in lower environmental concentrations than concentrations developed by using the maximum allowable application rate. Nevertheless, the maximum labeled rate is the allowable rate that may be applied, and therefore EFED must base its risk assessment on this rate.

4. BASF concern: For the PRZM/EXAMS scenario with the index reservoir, BASF believes that EFED assumed that all acres are treated with pesticide.

EFED response: EFED did consider that only a fraction of acreage is treated. For the case of the onion scenario, EFED's default value of 0.87 was used (see PCA Table 2 of original drinking water memo).

5. BASF concern: BASF believes that typical use rates rather than maximum labeled rate should be used for the PRZM/EXAMS/Index Reservoir simulation.

EFED response: see response to BASF concern #3.

6. BASF concern: The spray drift value is too high.

EFED response: The spray drift value that EFED used in the simulations was 16% of the mass that would be applied to a single acre (with total field area of 172.8 ha). This value was developed by the spray drift task force and is a standard EFED input parameter.

Tab 6. Water Exposure to 3,5-Dichloroaniline (DCA):

7. BASF concern: BASF believes that an assumption of 100% conversion of vinclozolin to DCA is inappropriate.

EFED response: In the ultimate EECs that EFED presented, EFED did not assume 100% conversion of vinclozolin to DCA. The 100% conversion was only initially assumed to obtain water concentrations for the particular case of 100% conversion. These water concentrations were subsequently reduced by the amount of undegraded vinclozolin in the water. The original drinking water memo explains the method and its justification.

8. BASF concern: other BASF concerns in Tab 6 are addressed in the Tab 5 responses above.

Tab 10. Vinclozolin Risk Assessment:

9. BASF concern: BASF prefers that typical use rates, rather than the maximum labeled use rate, be used in the risk assessment.

EFED response: *see response to BASF concern #3.*

10. BASF concern: BASF believes that the EFED should consider the fraction of acreage actually treated when risk assessments are made with the Kenaga monogram.

EFED response: *The Kenaga monogram is an empirically derived model that does not include the fraction of crop treated as an input parameter. Instead the Kenaga values are related to the local application rate, which according to standard EFED practice is the maximum allowable labeled amount applied to one acre.*